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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/707,051	11/18/2003	Michael J. ROSENDAUL	000297-203	1050		
29306	7590 02/23/2005		EXAMINER			
MARSTEL	LER & ASSOCIATES, P	MONBLEAU, DAVIENNE N				
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DALLAS, T	°X 75380-3302	ART UNIT	PAPER NUMBER			
				2878		
			DATE MAILED: 02/23/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	Application No. Applicant(s)		
		10/707,0	51	ROSENDAUL ET AL.	
	Office Action Summary	Examine	P	Art Unit	
			Monbleau	2878	
Period fo	The MAILING DATE of this communicator Reply	tion appears on the	e cover sheet with t	he correspondence a	ddress
THE - Exte after - If the - If NO - Failu	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA nsions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply specified above is less than thirty (30) day period for reply is specified above, the maximum statutous to reply within the set or extended period for reply will, reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no evertion. 9 ays, a reply within the state ory period will apply and with the app	ent, however, may a reply utory minimum of thirty (30 ill expire SIX (6) MONTHS	be timely filed  ) days will be considered time from the mailing date of this ONED (35 U.S.C. § 133).	
Status					
1)	Responsive to communication(s) filed o	n 18 November 2	003.		
2a)□		☐ This action is r	·· <del>······</del>		
3)□	Since this application is in condition for closed in accordance with the practice	·		·	ne merits is
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 1-18 is/are pending in the appleau of the above claim(s) is/are version Claim(s) is/are allowed.  Claim(s) 1-18 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction	withdrawn from co			
Applicat	ion Papers				
10)⊠	The specification is objected to by the Enthe drawing(s) filed on 18 November 20 Applicant may not request that any objection Replacement drawing sheet(s) including the The oath or declaration is objected to by	003 is/are: a)⊠ and to the drawing(s) be correction is required.	pe held in abeyance. red if the drawing(s) is	See 37 CFR 1.85(a). s objected to. See 37 C	OFR 1.121(d).
Priority ι	ınder 35 U.S.C. § 119				
a)	Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of the application from the International See the attached detailed Office action for the certified copies of the certified copies of the application from the International See the attached detailed Office action for the certified copies of the certified copies of the application from the International See the attached detailed Office action for the certified copies of the certified copies of the certified copies of the application from the International See the attached detailed Office action for the certified copies of the certified copies	cuments have been cuments have been to have been the priority documents.  Bureau (PCT Rule)	en received. en received in Appli ents have been rec e 17.2(a)).	ication No eived in this Nationa	l Stage
Attachmen			A) Interview Susse	nary (DTO 412)	
2) 🔲 Notic 3) 🔯 Infori	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO- nation Disclosure Statement(s) (PTO-1449 or PTO r No(s)/Mail Date 11/18/03.	•	Paper No(s)/Ma	nary (PTO-413) ail Date nal Patent Application (PT	O-152)

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### **DETAILED ACTION**

## Information Disclosure Statement

The IDS filed on 11/18/03 has been acknowledged. However, the Examiner believes that the reference cited on the PTO-1449 is incorrect due to a typo. The PTO-1449 cites "5150527", but the specification references "5130527". Examiner has changed the IDS accordingly and a signed copy of the PTO-1449 is attached herein.

#### Claim Objections

Regarding Claim 1, the phrase "night viewer system of the type that uses an image intensifier tube" is vague because it does not clearly define the night viewer system.

Further regarding Claim 1, the phrase "selected types of image intensifier tubes" is vague because it does not clearly state what image intensifier tubes are being referred to.

Lastly regarding Claim 1, it is not clear from which image intensifier tube the voltage gain is being detected. The claim recites that there is one image intensifier tube, but that the detection circuit detects multiple types of tubes.

Claim 8 recites the limitation "the variable resistor circuit unit" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 3, 4, 9, 11, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowen et al. (U.S. 6,150,650).

Regarding Claims 1 and 11, *Bowen* discloses in claim 1 an electrical circuit unit comprising a voltage gain detection circuit unit operably connected to an image intensifier tube (10) for detecting multiple selected types of image intensifier tubes (claim 1 lines 6-11 and producing an output gain signal appropriate to the detected image intensifier tube (10) for controlling the gain of the detected image intensifier tube.

Regarding Claims 3 and 13, *Bowen* discloses in Figure 11 a variable adjustment circuit operably connected between the voltage gain detection circuit unit and the image intensifier tube (10) for providing a desired voltage level signal to the image intensifier tube. *Bowen* further discloses in column 1 that a variable resistor circuit may be used.

Regarding Claims 4 and 14, *Bowen* discloses in column 7 lines 64-67 that the variable resistor circuit further includes a manual gain adjustment means for manually adjusting the desired voltage level signal to the image intensifier (10) by a user. (See also claim 1 lines 8-11).

Regarding Claim 9, *Bowen* discloses in column 4 lines 48-60 and column 5 lines 2-10 a DC-to-DC voltage step-up converter circuit unit for providing a desired power supply voltage signal to the image intensifier tube (10).

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 5-8, 10, 12, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen.

Regarding Claims 2 and 12, *Bowen* does not teach a voltage bias circuit. However, since *Bowen* is controlling the gain of the image intensifier tube, there must be a circuit component that is sending a voltage to the tube in order to control the gain of the tube. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a particular device, such as a voltage bias circuit unit, for its suitability with the other circuit components.

Regarding Claims 5 and 15, *Bowen* does not teach an amplifier circuit. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an amplifier in *Bowen* to increase the strength of the image intensifier tube (10) output signal.

Regarding Claims 6 and 16, *Bowen* teaches in Figure 2 gain limiting circuit elements (160 and 170), but does not teach a current limiting circuit unit. However, both devices result in limiting the output signal of the image intensifier tube (10) and thus serve a similar function.

Regarding Claims 7 and 17, *Bowen* teaches in Figure 11 a variable adjustment circuit operably connected between the voltage gain detection circuit unit and the image intensifier tube

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(10) for providing a desired voltage level signal to the image intensifier tube. Bowen further teaches in column 1 that a variable resistor circuit may be used.

Regarding Claims 8 and 18, Bowen teaches in Figure 11 a variable adjustment circuit operably connected between the voltage gain detection circuit unit and the image intensifier tube (10) for providing a desired voltage level signal to the image intensifier tube. Bowen further teaches in column 1 that a variable resistor circuit may be used. Bowen does not teach an amplifier circuit. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an amplifier in Bowen to increase the strength of the image intensifier tube (10) output signal.

Regarding Claim 10, Bowen teaches a DC to DC voltage step-up converter circuit, but does not teach that it boosts the voltage of the power source by two times. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to boost the voltage of the power source by a particular amount depending on what voltage was required to operate the image intensifying tube (10) circuitry and the desired output level of the image intensifying tube (10).

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Fish (U.S. 6,157,021) teaches an active regulator that reduces the noise occurring on an image intensifier tube particularly suited for use in a night vision system.

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Saldana (U.S. 5,883,381) teaches a night vision device having a power supply which delivers a high voltage level to is MCP through a variable resistance device, wherein said MCP is part of an image intensifier tube.

Estrera et al. (U.S. 6,320,180) teaches a gated power supply circuit for an image intensifier tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DNM

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